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ABSTRACT

Tied to 1970 benchmark figures developed to reflect the 1970 relationship between regional farm population estimates obtained from the Census of Population and the Current Population Survey, this 1975 report on farm population estimates is derived from a probability area sample of the 48 conterminous States, consisting of approximately 17,000 area segments providing information on about 25,000 farm households. Presented via narrative and tabular data, this report includes: U.S. farm population by regions and divisions, April 1975 and 1970; U.S. farm population and components of farm population change by regions and divisions, April 1974-75; annual averages of components of farm population change and rate of net migration for the U.S. by regions and divisions, April 1970-75; net outmigration from the farm population, 1920-75; and farm population and migration, 1920-75. Among the more pertinent data presented are: the number of persons living on U.S. farms averaged 8,864,000 in the 12-month period; the 1975 farm population was 850,000 or 8.7% less than in 1970; for the 1970-75 period, the average net loss to the farm population via migration or reclassification of residence was about 200,000 or 2.1% annually; both the number of net outmovers and the rate of outmovement for 1970-75 were substantially less than in other recent periods; while the South continued to have a heavy loss of farm population, the West was estimated to have increased by 5%. (JC)

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FARM POPULATION ESTIMATES FOR 1975

Vera J. Banks

United States Department of Agriculture
Economic Research Service

Agricultural Economic Report No. 352

FARM POPULATION ESTIMATES FOR 1975. By Vera J. Banks. Economic Development Division, Economic Research Service, U.S. Department of Agriculture. Agricultural Economic Report No. 352.

Abstract

The number of persons living on U.S. farms averaged 8,864,000 in the 12-month period centered on April 1975. In continuation of a long-time downward trend, the 1975 farm population was 850,000—or 8.7 percent—less than in 1970. For the 1970-75 period, the average net loss to the farm population through migration or reclassification of residence from farm to nonfarm was about 200,000 annually. The average rate of this net loss was 2.1 percent a year. Both the number of net outmovers and the rate of outmovement for 1970-75 were substantially less than in other recent periods. The South, with a 16-percent decline since 1970, continued its heavy loss of farm population. The farm population in the West is estimated to have increased 5 percent since 1970; it declined in other regions.

Keywords: Farm population, Migration, Regional analysis.

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FARM POPULATION ESTIMATES FOR 1975

by Vera J. Banks, Economic Development Division

The number of persons living on farms in rural areas of the United States averaged 8,864,000 in the 12-month period centered on April 1975 (table 1).[1] This is about 400,000—4.3 percent—lower than the 1974 estimate of 9,264,000. These estimates are based on a sample survey and there is some evidence that the decrease is statistically significant, because the chances are only about 1 out of 25 that a decline of this magnitude would have been obtained from the sample without any actual change in the farm population between 1974 and 1975.

Between 1970 and 1975, the U.S. farm total dropped by about 850,000 persons or 8.7 percent. The rate of farm population loss during this 5-year period averaged 1.8 percent annually. Although this decrease in the number of farm residents represents a continuation of a long-term downward trend, the average yearly loss indicated for this 5-year period is considerably less than in earlier years. During the 1940-50 decade, the number of persons living on farms declined 2.8 percent a year. In the 1950's, the yearly rate rose to 3.9 percent. For 1960-70, the rate reached a high of 4.8 percent annually.

Of the 213 million people in the United States in April 1975, about 4.2 percent—about 1 person in 24—lived on a farm.[2] The remainder of the people were living in urban areas, small rural towns, and the open country. When the number of U.S. farm residents reached its estimated peak in 1916, about 1 person in 3 lived on a farm.[3] However, steady increases in the number of persons living in nonfarm areas accompanied by an almost continuous farm population decrease have resulted in an ever declining farm share of the U.S. total population.

Farm Population Changes in Geographic Regions and Divisions

The U.S. farm population is concentrated in the North Central and Southern regions of the country.[4] These two areas have historically contained the great majority of all farm residents. However, persistently heavier rates of population loss since the 1940's have resulted in a decline in the relative position of the South. The trend of a decreasing share of the national farm total for the South and an increasing proportion for the North Central States continued through the 1970-75 period. In 1975, the South had 3.1 million farm residents—a little more than a third of the national farm total. The North Central States had 4.1 million farm people—almost half of the U.S. total. The Northeast and West combined still contain less than a fifth of all farm people, although there is a long-time trend of slight increases in their share of the farm total.

As late as 1950, the South still had more than half of all farm people. Between 1950 and 1975, the proportion of the farm population residing on farms in the South fell from 52 percent to 35 percent. This decline in the South's proportionate share of the U.S. farm total resulted from a persistently heavier rate of farm population loss in this region, compared with the rest of the country. The more rapid decrease of Southern farm population can be attributed in large part to the mechanization and modernization of crop farming (especially cotton), and the near abandonment of share-cropping.

During this same period, the North Central Region's proportion of the national farm total rose from 32 percent to 46 percent. This region contains the Corn Belt, Northern Plains, and Lake States farm production

[1] This estimate is an annual average computed by using quarterly data for the year centered on the April date for which the estimate is prepared. In this case, quarterly estimates for October 1974 and January, April, July, and October 1975 were used (see explanation on p.7).

[2] Banks, Vera J., Diana DeAre, and Robert C. Speaker. Farm Population of the United States: 1975. Current Population Reports, Farm Population, Series Census-ERS, P-27, No. 47. U.S. Bur. Census and U.S. Dept. Agr., Washington, D.C., Sept. 1976.

[3] Banks, Vera J., and Calvin L. Beale. Farm Population Estimates, 1910-70. Stat. Bul. 523, U.S. Dept. Agr., Washington, D.C., July 1973.

[4] States in geographic regions and divisions are listed in table 1, footnote 1.

Table 1–U.S. farm population by regions and divisions, April 1975 and 1970

Area	Number		Percentage distribution		Percentage change, 1970-75
	1975[1]	1970	1975[1]	1970	
	Thousands		*Percent*		
United States	8,864	9,712	100.0	100.0	-8.7
Region:					
Northeast	641	699	7.2	7.2	-8.3
North Central	4,080	4,305	46.0	44.2	-5.2
South	3,140	3,754	35.4	38.7	-16.4
West	1,003	954	11.3	9.8	5.1
Division:					
New England	130	128	1.5	1.3	1.4
Middle Atlantic	511	571	5.8	5.9	-10.5
East North Central	1,834	2,053	20.7	21.1	-10.7
West North Central	2,246	2,252	25.3	23.2	-.2
South Atlantic	1,076	1,357	12.1	14.0	-20.7
East South Central	1,199	1,329	13.5	13.7	-9.7
West South Central	865	1,069	9.8	11.0	-19.1
Mountain	434	446	4.9	4.6	-2.8
Pacific	569	508	6.4	5.2	12.0

[1] Similar estimates for States are not available. States in the geographic regions and divisions are: NORTHEAST–*New England*: Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut; *Middle Atlantic*: New York, New Jersey, Pennsylvania. NORTH CENTRAL–*East North Central*: Ohio, Indiana, Illinois, Michigan, Wisconsin; *West North Central*: Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, Kansas. SOUTH–*South Atlantic*: Delaware, Maryland, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida; *East South Central*: Kentucky, Tennessee, Alabama, Mississippi; *West South Central*: Arkansas, Louisiana, Oklahoma, Texas. WEST–*Mountain*: Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada; *Pacific*: Washington, Oregon, California, Alaska, and Hawaii.

areas.[5] An examination of average distribution of farm output during the 1972-74 period revealed these three highly efficient farm production areas produced 45 percent of the U.S. total national farm crop and livestock output.[6] In 1950, the East North Central and West North Central divisions of the North Central Region each contained about 16 percent of all farm people. In 1975, these proportions had risen to 21 percent and 25 percent, respectively.

During the 1970-75 period, all of the three geographic divisions of the South experienced a significant decrease in their share of the national farm population with heavier losses occurring in the South Atlantic States. During this 5-year span, the population living on Southern farms decreased 16 percent.

The Northeast and North Central regions also lost farm population from 1970-75, but at a considerably lower rate. A 5-percent increase in the number of farm people was indicated for the West. This regional farm population gain is attributable to the Pacific States, which show a 12-percent increase since 1970.

Components of Farm Population Change

Between April 1974 and April 1975, an estimated 425,000 persons across the Nation either moved away from farms or lived on places that were removed from the farm category because agricultural operations ceased (table 2). This loss was partly offset by an estimated 25,000 more births than deaths among farm people.

Estimates of the components of farm population change–births, deaths, and net change through migration and reclassification of residence–fluctuate from year to year. In great part, this is due to sampling variation; therefore, averages for a period of years are deemed more reliable. For the period 1970-75–on the average–a net of about 200,000 people of all ages left the farm population each year through actual migration or reclassification of residence from farm to nonfarm (table 3). The average of 30,000 more farm births than deaths partly offsets this loss.

[5] States in these farm production areas are: *Corn Belt* - Iowa, Missouri, Illinois, Indiana, and Ohio; *Northern Plains* - North Dakota, South Dakota, Nebraska, and Kansas; *Lake States* - Minnesota, Wisconsin, and Michigan.

[6] Unpublished data from Economic Research Service, U.S. Dept. of Agr.

Table 2–U.S. farm population and components of farm population change, by regions and divisions, April 1974-75

Area	Farm population, April 1975	Natural increase			Net change through migration and reclassification of residence[1]	Farm population, April 1974
		Total	Births	Deaths		
	Thousands					
United States	8,864	25	116	-91	-425	9,264
Region:[2]						
Northeast	641	1	9	-8	-15	655
North Central	4,080	12	53	-41	-120	4,189
South	3,140	7	40	-33	-218	3,350
West	1,003	5	14	-10	-72	1,070
Division:[2]						
New England	130	(3)	2	-2	-1	131
Middle Atlantic	511	1	7	-6	-14	524
East North Central	1,834	4	22	-18	-29	1,859
West North Central	2,246	8	31	-23	-91	2,329
South Atlantic	1,076	2	14	-12	-84	1,159
East South Central	1,199	2	15	-13	-56	1,253
West South Central	865	3	11	-9	-77	939
Mountain	434	3	7	-4	-27	459
Pacific	569	2	8	-5	-45	612

[1] Includes persons who did not move but who were in or out of the farm population because agricultural operations on the places where they were living either ceased or were begun. [2] Similar estimates for States are not available. For States included in each region and division, see table 1. [3] Fewer than 500 people.

Table 3–Annual averages of components of farm population change and rate of net migration for the United States, by regions and divisions, April 1970-75

Area	Natural increase			Net change through migration and reclassification of residence[1]	Annual rate of net migration[2]
	Total	Births	Deaths		
	Thousands				*Percent*
United States	30	124	-94	-199	-2.1
Region:[3]					
Northeast	1	9	-8	-13	-1.9
North Central	13	56	-42	-58	-1.4
South	10	45	-35	-133	-3.8
West	5	14	-9	5	.5
Division:[3]					
New England	(4)	2	-2	(4)	- - -
Middle Atlantic	1	7	-6	-13	-2.5
East North Central	5	24	-19	-49	-2.5
West North Central	9	31	-23	-10	-.4
South Atlantic	3	16	-13	-59	-4.8
East South Central	4	17	-13	-29	-2.3
West South Central	3	13	-9	-44	-4.5
Mountain	2	7	-4	-5	-1.1
Pacific	2	7	-5	10	1.8

[1] Includes persons who did not move but who were in or out of the farm population because agricultural operations on the places where they were living either ceased or were begun. [2] Based on annual average net change in poulation through migration per 100 persons in the average April farm population for the period indicated. [3] Similar estimates for States are not available. For States included in each region and division, see table 1. [4] Fewer than 500 people.

The smaller absolute average amount of net outmovement for 1970-75 compared with earlier 5-year periods reflects the declining farm population from which migrants are drawn. It is no longer possible for the farm population to continue to yield more than 500,000 net migrants a year as it did during the previous three decades (figure 1). More people are thought to be involved in actual net outmovement than in the reclassification of residences from farm to nonfarm. However, the exact extent of these components separately is not known.

The annual rate of net outmigration—in which the average amount of net migration and reclassification is expressed as a percentage of the average farm population—was 2.1 percent for 1970-75. Unlike the absolute average numbers of outmigrants which have declined since the early 1950's, the rate of net outmovement remained about 5 percent throughout the last two decades (figure 2). The farm population has not experienced as low a rate of outmovement as that indicated for the 1970's since 1945-50, when returning World War II veterans and defense workers temporarily checked farm population decrease.

All U.S. geographic regions and divisions had a significant decrease in both volume and rate of farm outmigration during 1970-75, compared to earlier years.

Definitions and Explanations

Population coverage: Estimates presented in this report relate to the rural civilian population living on farms, without regard to occupation. For convenience, the term "farm population" is used without qualification, although the relatively few members of the Armed Forces living on farms are excluded.

Farm population: Since 1960, the farm population has been defined as all persons living in rural territory on places of 10 or more acres, if as much as $50 worth of agricultural products were sold from the place in the reporting year. It also includes those living on places of under 10 acres, if as much as $250 worth of agricultural products were sold from the place in the reporting year. Persons in institutions, summer camps, motels, and tourist camps as well as those living in rented places where no land is used for farming are classified as nonfarm.

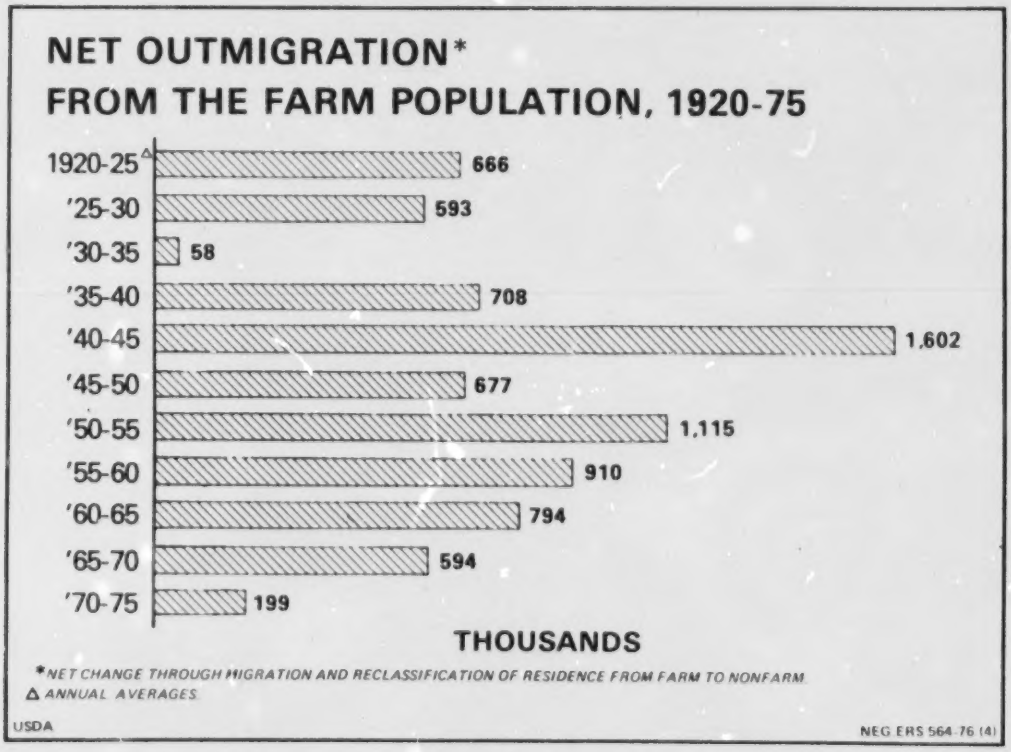

Figure 1

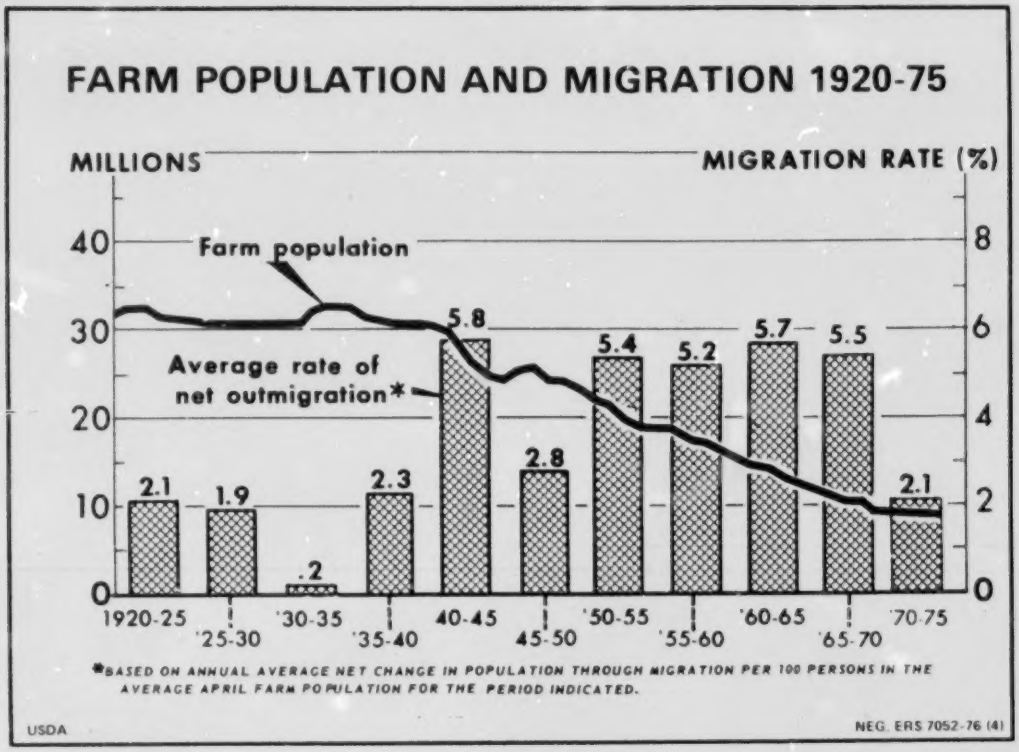

Figure 2

In the Current Population Survey of the Bureau of the Census (CPS), from which current estimates of the total U.S. population are obtained, unmarried persons attending college away from home are enumerated as residents of their parents' homes. In the Censuses of Population, such persons are enumerated as residents of the communities in which they live while attending college. The effect of this difference is to classify a larger number of college-age persons as farm residents in the CPS than would be so classified under decennial census usage.

April-centered annual averages: Such averages of the total U.S. farm population are computed by using data from the five quarters centered on the April date for which the estimate is being prepared. For example, for April 1975, quarterly estimates for October 1974 and January, April, July, and October 1975 were used with a weight of one-eighth given to each of the two October estimates and a weight of one-fourth to each of the estimates of the other 3 months.

Rounding: Individual figures in this report are rounded to the nearest thousand and have not been adjusted to group totals, which are independently rounded. Percentages are rounded to the nearest tenth of a percent; therefore, percentages in a distribution do not always add to exactly 100 percent.

Sources and limitations: Annual estimates of the total number of people living on U.S. farms are obtained from the Current Population Survey of the Bureau of the Census. These estimates are based on sample data and are subject to sampling variability.

The standard error is primarily a measure of sampling variability; that is, of the variations occurring by chance because a sample rather than the whole of the population is surveyed. The calculated standard error also partially measures the effect of response and enumeration errors but does not measure any systematic biases in the data. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census figure by less than the standard error. Chances are about 95 out of 100 that the difference would be less than twice the standard error. Tables of standard errors for April-centered annual averages for 1970-75 are presented in the joint annual Census-ERS farm population report for 1975 (see footnote 2).

Data for geographic areas and for components of farm population change are based on data obtained from the 1975 and earlier June Enumerative Surveys of

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USDA's Statistical Reporting Service. The 1975 sample for the survey was a probability area sample of the 48 conterminous States, consisting of approximately 17,000 area segments (sampling units). Information was obtained from about 25,000 farm households associated with these sample units.

Since the estimates are based on a sample, they may differ somewhat from figures that would be obtained if a complete census count had been taken. As in any survey work, results are subject to error of response and of reporting as well as to sampling variability.

Area estimates for 1975 are tied to 1970 benchmark figures developed to reflect the 1970 relationship between regional farm population estimates obtained from the Census of Population and the Current Population Survey. In addition to being tied to benchmark figures for decennial census years, the area estimates are adjusted to conform to the total farm population estimates obtained annually by the Bureau of the Census.

Earlier comparable reports: Estimates for earlier years on number, migration, and natural increase of farm people were published by USDA in *Farm Population Estimates, 1910-70*, Stat. Bul. 523, July 1973. Annual estimates from 1971 to date are available in:

(1) *Farm Population Estimates for 1971 and 1972* (RDS-1).
(2) *Farm Population Estimates for 1973* (ERS-561).
(3) *Farm Population Estimates for 1974* (AER-319).

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